

What is claimed is:

1. A communication system comprising a combination of (A) a wireless communication device with two separate transceivers and a unique access number (B) said transceivers with a short-range wireless or wired transceiver and long-range wireless transceiver, (C) a communication management system from the group of local communication management system for individual coordinated device connectivity, distributed communication management system for management of multiple communication devices, (D) said communication management system performing dynamic switching of communication transceivers and dynamic addressing of communication devices within the network of communication devices.

2. The wireless transceivers of claim 1, wherein the standard wireless means further comprising the step of selecting from the group of wireless optical means, wireless power-line carrier means, wireless radio-frequency means, and wireless radar means; in that said wireless means has minimal interference between the short-range means and long-range means, and from multiple devices within the same wireless means; and in that said wireless means has multiplexing means further selected from the group of code division and time division multiplexing to increase maximum node devices.

3. The unique access number of claim 1, wherein the access number is selected from one of the group of standard telephone number, Internet Protocol address, government assigned identification number, and company assigned encrypted number; in that said unique access number is cross-referenced in a lookup table to provide current access numbers and sequential prioritization of access numbers by a routing manager; and in that said is unique access number is cross-referenced in a database further comprising the step of selecting type from the group of object-oriented, relational, semantic, and flat-file databases, and is further comprised of data files selected from the group of personal, professional, marketing, fax, e-mail, voice-mail, cellular, dynamic or static Internet Protocol address, pager, membership, and historic data.

4. The communication management system performing dynamic switching of communication transceivers of claim 1 is further comprised of a local communication

management system on the communication device and a distributed communication management system that manages and coordinates the actions and interactions between the individual components at the device level and system level, wherein the local communication management system preferably establishes a communications link with the short-range wireless transceiver; in that said communications link the type of data transferred is further selected from the group of digital and analog data between originator and terminator devices; in that said communications link further operates in a mode selected from the group of static and dynamic modes of operation with local and remote channel managers; and that said mode generates a warning signal when the signal strength and bandwidth availability falls below a local threshold, and below a remote threshold.

5. The communication devices of claim 1, wherein the devices operates as selected from the group of telephone with operations of data transfer further comprising the selection step of simultaneous bi-directional exchange of digital or analog data, or walkie-talkie with operations further of data transfer comprising the selection step of uni-directional exchange of digital or analog data; and that said data is further selected from the group of messaging, paging, data exchange, and standard voice data; and that said telephone features selected from the group of conference calling, call waiting, call forwarding, and voice mail retrieval and recording.

6. The communication management systems of claim 4, wherein the management system utilizes thresholds in its dynamic algorithms further comprising the step of selecting from the group of local threshold that enables dynamic switching between short-range channel managers, or remote threshold that enables dynamic switching between long-range channel managers, or seamless threshold that enables dynamic switching between short-range and long-range communication channel managers.

7. The communication management system mode of claim 6, wherein the mode is further selected from the group of static and dynamic sub-modes.

8. The communication management systems dynamic switching of claim 6, wherein the dynamic switch occurs when a standby communications link is successfully established.

9. The dynamic algorithms of claim 6, wherein the algorithms select the optimal

communications link utilizing factors selected from the group of customer cost, frequency of switching, communications link quality, historical performance, membership privileges, available channel manager features, and rate of signal strength deterioration or increase.

10. The dynamic algorithms of claim 6, wherein the algorithms select the optimal address utilizing factors selected from the group of time to register a new dynamic address, communications latency times, and routing capacity availability.

11. The dynamic address of claim 10, wherein the dynamic address is optimized throughout the communications process that further includes the establishment of the device as a recognized device and the establishment of the device with an initial communications link.

12. The communication devices of claim 1, wherein the device is in a special device class to differentiate between communication devices disclosed in the invention and standard network devices, said special device class improves network security.

13. The communication management system of claim 1, wherein the management system extends the traditional caller identification systems by making known both the call originator and the desired call terminator.

14. The communication management system of claim 13, wherein the management system serves multiple access numbers concurrently; in that said multiple access numbers are further handled as selected from the group of distinct ring to distinguish between a certain call terminator and others, routing to voice-mail, and screening-in and screening-out filters for process handling of communications link.

15. The communication devices of claim 1, wherein the device makes known its geographic location; in that said geographic location is determined by the step of selecting from the group of channel manager known location, triangulation of signal strengths from multiple channel managers with their known location, global positioning system, or local positioning system.

16. The knowledge of geographic location of claim 15, wherein the location is utilized for multiple functions selected from the group of displaying graphically the location to specified and authorized parties, conveying geographic specific messages such as the issuance of welcome

messages, safety, marketing, optimal routing, addressing, communications link, audit trail for payroll, audit trail for security, and individual profiling.

17. The welcome message of claim 16, wherein the message takes the multiple forms as selected from the group of walkie-talkie voice message, a phone call voice message, an e-mail message, issuance of coupons, and acknowledgement of registration.

18. The communication management system of claim 1, wherein the management system further includes software to perform a wide range of control; in that said control software is selected from the group excluding any third party from knowledge of presence, audit trail, billing, communications latency, user identification services; and that said user identification services are selected from the group of buying preferences, geographic location restrictions, and customer identification.

19. The knowledge of geographic location of claim 15, wherein the location coupled with the communication system's knowledge of known geographic locations and coverage areas of channel managers is utilized to enable or disable the short-range communication modes, said disabling conserves battery power and communications bandwidth.

20. The communication devices of claim 1, wherein the device utilizes an integrated data scanner to trigger specific messages with context sensitive information between device and channel manager; in that said data scanner is selected from the group of bar code scanner, read system such as radio frequency identification tags, optical readers, and infrared transceiver; and that said context sensitive information is selected from the group of registration of an individual communication device into a specific channel manager, inquiry of product pricing information, generation of manufacturer's coupon, broadcast of known geographic location to communication management system, broadcast of user's identification to a specific registered device, and authorization to initiate the sending of encrypted transactional information.